

**CLAIMS**

We claim:

1. A message processing system for transmitting and receiving messages between a host computer system application and a distributed computer system application, the message processing system comprising:

a distributed message transmission application associated with the distributed computer system application operative to process a message generated by the distributed computer system application, and to transmit the message to the host computer system application over the communication network;

a host system message transmission application associated with a host application and operative to process a message received from the distributed message transmission application; and

a distributed computer program interface functionally connected to the distributed computer system application and to the distributed message transmission application and operative to configure the message for transmission over a communication network.

2. The message processing system of Claim 1, wherein the configuration of the message for transmission over the communication network comprises associating a transmission profile with the message.

3. The message processing system of Claim 2, further comprising a distributed computer program interface that is operative to associate the message with a transmission profile stored in a profile database.

5           4.       The message processing system of Claim 3, wherein the distributed  
computer program interface comprises a profile manager operative to examine at  
least one characteristic of the message to determine the transmission profile to be  
associated with the message.

10           5.       The message processing system of Claim 4, wherein the message  
characteristic is an application identifier.

15           6.       The message processing system of Claim 4, wherein the message  
characteristic is a serial number.

            7.       The message processing system of Claim 4, wherein the message  
characteristic is a record sequence indicator.

20           8.       The message processing system of Claim 4, wherein the message  
characteristic is an application data.

            9.       The message processing system of Claim 4, wherein the message  
characteristic is a command character.

25           10.       The message processing system of Claim 4, wherein the  
communication network is a peer-to-peer network.

5           11.    The message processing system of Claim 4, wherein the  
communication network is a client-server network.

          12.    The message processing system of Claim 4, wherein the  
communication network is a wide area client-server network.

10           13.    The message processing system of Claim 4, wherein the message is  
a request reply message.

          14.    The message processing system of Claim 4, wherein the message is  
15 a send-and-forget message.

          15.    The message processing system of Claim 4, wherein the message is  
a broadcast message.

20           16.    The message processing system of Claim 15, wherein the  
broadcast message is generated by a publishing service application and wherein  
the broadcast message is received by a subscribing network element.

5           17. A method for processing a message between a first application running on a first network element and a second application running on a second network element of a communication network, the method comprising the steps of:

generating the message in the first network element;

10           configuring the message for transmission over the communication network;

transmitting the message over the communication network; and

delivering the message to the second network element;

15           wherein the step of configuring the message for transmission comprises translating the message into a format associated with the second application.

20           18. The method of Claim 17, wherein the step of configuring the message for transmission over the communication network comprises associating a transmission profile with the message.

19. The method of Claim 18, wherein the step of configuring the message for transmission over the communication network comprises accessing a profile database to associate the transmission profile with the message.

25           20. The method of Claim 19, wherein the step of configuring the message for transmission over the communication network comprises associating the transmission profile with the message, based on at least one message characteristic.

5           21.    The method of Claim 20, wherein the message characteristic is an application identifier

          22.    The method of Claim 20, wherein the message characteristic is a serial number

10           23.    The method of Claim 20, wherein the message characteristic is a record sequence indicator

          24.    The method of Claim 20, wherein the message characteristic is a  
15 application data

          25.    The method of Claim 20, wherein the message characteristic is a command character

20           26.    The method of Claim 18, wherein the transmission profile comprises a transport identifier operative to associate the message with a transport to be used to transmit the message over the communication network.

          27.    The method of Claim 18, wherein the transmission profile  
25 comprises a service identifier operative to associate the message with a message format to be used to transmit the message over the communication network.